Paper No. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte YUKIO TANIGAWA and TADASHIGE HATA

Appeal No. 1999-1878
Application No. 08/799,411

HEARD: January 08, 2002

Before, WARREN, KRATZ, and TIMM, Administrative Patent Judges.
KRATZ, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1-4, 6, 7, 9 and 11-20, which are all of the claims that remain pending in this application.[1]

[1] This appeal only involves claims 1-4, 6, 7, 9 and 11-20 since the record reflects that an amendment after final rejection (Paper No. 11) cancelling finally rejected claims 8 and 10 was approved by the examiner as "O K to Enter" by so marking page 1 thereof and has been physically entered. This is consistent with appellants' statement (brief,page 1) that "claims 1-4, 6, 7, 9 and 11-20 are being appealed and with the examiner's statement of the rejection (answer, item No. 10). The statement in the answer (item No. 4) agreeing with appellants' statement that "[n]o after-final amendments were

BACKGROUND

Appellants' invention relates to a polyacetal resin composition and a method of making such a composition. An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below.

> 1. A polyacetal resin composition which comprises about 100 parts by weight of a polyacetal having a residual fluorine concentration of not more than about 13 ppm and a concentration of formaldehyde generated when the polyacetal is heated at about 230 EC for about 30 minutes in nitrogen of not more than about 500 ppm; from about 0.01 to about 3 parts by weight of an antioxidant; and from about 0.001 to about 5 parts by weight of a basic substance, wherein the polyacetal is a polymer obtained by polymerizing trioxane or a mixture of trioxane with a comonomer in the presence of at least one polymerization catalyst selected from the group consisting of boron trifluoride, boron trifluoride hydrate and a coordination complex compound of an organic compound containing an oxygen atom and a sulfur atom with boron trifluoride.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

MacDonald	2,768,994	Oct. 30, 1956
Walling et al. (Walling)	3,027,352	Mar. 27, 1962

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filed" (brief, page 2) is obviously in error since appellants' do not refer to that subsequently filed amendment after final (Paper No. 11) in their brief.

Mantell	3,252,940	May 24, 1966
Berardinelli et al. (Berardinelli)	3.313.767	Apr. 11, 1967
Charles et al. (Charles)	3,397,182	Aug. 13, 1968
Kakos, Jr. (Kakos)	3,484,399	Dec. 16, 1969
Sadlowski et al. (Sadlowski)	4,431,794	Feb. 14, 1984
Paul et al. (Paul)	4,727,106	Feb. 23, 1988
Matsumoto et al. (Matsumoto)	5,191,006	Mar. 02, 1993

Claims 1-4, 6, 7, 9 and 11-20 stand rejected under 35 U.S.C. § 103 as being unpatentable over MacDonald, Walling, Mantell, Berardinelli, Charles, Kakos, Sadlowski, Paul, and Matsumoto. We refer to appellants' briefs and to the examiner's answer for an exposition of the respective viewpoints expressed by appellants and the examiner concerning the rejection.

OPINION

Upon careful review of the entire record including the respective positions advanced by appellants and the examiner with respect to the rejection before us, we find ourselves in agreement with appellants' viewpoint since the examiner has failed to carry the burden of establishing a prima facie case

of obviousness. See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); In re Piasecki, 745 F.2d 1468, 1471-1472, 223 USPQ 785, 787-788 (Fed. Cir. 1984). Accordingly, we will not sustain the examiner's rejection.

We point out that in a rejection under 35 U.S.C. § 103, it is fundamental that all elements recited in a claim must be considered and given effect in judging the patentability of that claim against the prior art. See In re Geerdes, 491 F.2d 1260, 1262-63, 180 USPQ 789, 791 (CCPA 1974). Thus, a prima facie case of obviousness is established by showing that some objective teaching or suggestion in the applied prior art taken as a whole and/or knowledge generally available to one of ordinary skill in the art would have led that person to the claimed invention, including each and every limitation of the claims, without recourse to the teachings in appellants' disclosure. See generally In re Oetiker, 977 F.2d 1443, 1447-48, 24 USPQ2d 1443, 1446-47 (Fed. Cir. 1992) (Nies, J., concurring). This showing can be established on similarity of

product or of process between the claimed invention and the prior art.

The appealed claims require a resin composition including, inter alia, a polyacetal having the property of generating a concentration of formaldehyde of not more than about 500 parts per million upon heating at about 230 °C for about 30 minutes and a method of preparing such a resin composition. Here, the examiner has not established that one of ordinary skill in this art would have been led to a resin composition including a polyacetal within the scope of the appealed claims or process of making same based on the teachings of the applied references. With regard to the claimed limitation concerning the polyacetal having a property of generating a concentration of formaldehyde of not more than 500 ppm when the resin is heated at about 230 °C for about 30 minutes, the examiner does not specifically point out where the combined teachings of the references would have led one of ordinary skill in the art to a resin composition having a polyacetal with such a property together with the other claimed limitations. Rather, the examiner merely offers an unsupported opinion that "... the prior art is well aware that

superior heat stability is known to be obtainable by doing so" (answer, page 5) and that "[i]n so far as the initial amount of formaldehyde emission is less than 500 ppm under the test procedure utilized, 3 out of the 4 comparative tests presented relate this is evidently typical of prior art formulations" (answer, page 6).

This speculative statement of the examiner concerning the prior art status of the comparative tests reported by appellants at pages 20-22 of their specification is insufficient standing by itself to establish that supposition as fact. This is especially so given that appellants have disputed the examiner's allegations concerning the prior art status of the comparative examples presented in their specification (reply brief, pages 4 and 5). In order for a prima facie case of obviousness of the claimed invention to be established, the prior art as applied must be such that it would have provided one of ordinary skill in the art with both a suggestion to carry out appellants' claimed invention and a reasonable expectation of success in doing so. See In re Dow Chemical Co., 837 F.2d 469, 473, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988). "Both the suggestion and the expectation of

success must be founded in the prior art, not in the applicant's disclosure." *Id*. Since the examiner has not carried the burden of particularly pointing out where a suggestion that would have led one of ordinary skill in the art to make a resin composition having all of compositional attributes claimed herein is supported by the applied references' teachings, we reverse the stated rejection.

CONCLUSION

The decision of the examiner to reject claims 1-4, 6, 7, 9 and 11-20 under 35 U.S.C. § 103 as being unpatentable over MacDonald, Walling, Mantell, Berardinelli, Charles, Kakos, Sadlowski, Paul, and Matsumoto is reversed.

REVERSED

CHARLES F. WARREN Administrative Patent Judge	)
PETER F. KRATZ Administrative Patent Judge	) BOARD OF PATENT APPEALS AND INTERFERENCES
CATHERINE TIMM Administrative Patent Judge	)

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APPEAL NO. - JUDGE KRATZ
APPLICATION NO.

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DECISION: **ED**

Prepared By:

DRAFT TYPED: 24 Jul 02

FINAL TYPED: